

## Messier Marathon at UACNJ First Clear Night—March 18-21

Jim Norton, NWJAA, AAI

As a benefit to our member clubs, UACNJ is offering a night of astronomical treasure hunting for amateur astronomers at our facility in Jenny Jump State Forest. Please contact one of the clubs below to participate.

### **Amateur Astronomers Association of Princeton (AAP)**

Larry Smith [lcs1@patmedia.com](mailto:lcs1@patmedia.com) or 908-874-3552

### **Amateur Astronomers, Inc. (AAI)**

Marcus Valdez [mlv101@yahoo.com](mailto:mlv101@yahoo.com) or 908-759-3903

### **Bucks-Mont Astronomical Association (BMAA)**

Bernie Kosher [bkhere@optonline.net](mailto:bkhere@optonline.net) or 609-888-0183

### **Morris Museum Astronomical Association (MMAS)**

Bill Eberly [rweberly@aol.com](mailto:rweberly@aol.com) or 973-398-5447

### **New Jersey Institute of Technology Astronomy Club**

Dale Gary [dgary@njit.edu](mailto:dgary@njit.edu) or 908-898-1553

### **North West Jersey Amateur Astronomers (NWJAA)**

Gil Jeffer [gil.jeffer@gmail.com](mailto:gil.jeffer@gmail.com) or 908-637-9994

### **Skylands Star Gazers (SSG)**

Ron Russo [ron@roned.com](mailto:ron@roned.com) or 973-673-1631

## When?

Messier Objects can be found at various times throughout the year, but all can be observed in the course of one night during the period between March 5 and April 12. The best nights are usually between March 30 and April 3. However, the end of March has a full moon that will wash out large parts of the sky this year. Therefore, UACNJ has chosen the nights of March 18-21 as the most optimum for observation of the Messier Objects. Trying to pick a night in advance that is clear and cloudless is quite difficult so we are waiting until the five-day weather forecast is available to determine the best possible viewing night for observing the Messier Objects. Look for an announcement on the UACNJ and NJAstronomers email lists.

## Equipment?

What does one need to participate in a Messier hunt? The most important thing is a clear dark site with low horizons. Jenny Jump meets this standard! Many Messier objects are visible to the naked eye and almost all can be found with binoculars, but for revealing any detail one might want to use 3- to 4-inch refractor, or 6" to 8" reflector. UACNJ plans to have four quality telescopes available to be used by participants.

## Upcoming Events

**February 13**

**March 6, March 27**

*Work Sessions*

**March 18-21**

*Messier Marathon at UACNJ*

**March 20 & 27**

*Observer Training*

**April 1, 2010**

*Observer Forms due*

### **President**

Dale Gary (AAI)

### **Vice President**

Gil Jeffer (NWJAA)

### **Secretary**

Krishnadas Kootale (MMAS)

### **Treasurer**

Diane Jeffer (NWJAA)

### **Trustee 2008-2010**

Walter Rothaug (RAC)

### **Trustee 2009-2011**

Jim DeLillo (MMAS)

### **Trustee 2010-2012**

Jim Norton (NWJAA)

### **Credentials Committee**

Ron Russo (MMAS, SSG)

### **Finance Committee**

Karl Hricko (AAI)

### **Observatory Committee**

Gil Jeffer (NWJAA)

### **Communications**

### **Committee**

Sherwood Waggy (NWJAA)

### **Membership Committee**

Diane Jeffer (NWJAA)

## 2010 Observers

The 2010 Observer Form is available in the files section of the UACNJ and NJAstronomers email lists. Mail yours today to assure your first choice of teams for the 2010 public season!

## Who was Messier? Why a Marathon?

Between 1754 and 1781, Charles Messier, a hunter of comets, recorded the position of many objects in the skies that were not stars and were not comets. These objects have proved to be some of the most interesting and beautiful in the night sky. During one week of the year, it is possible to view all of the Messier Objects in one night – beginning with the ones that are setting at dusk and ending with those that are just rising at dawn. The purpose of observing the objects in one night is to acquire the knowledge and skills to find the objects in a limited time frame. First timers have had great success in locating many of the objects, while experienced observers will enjoy the challenge finding the most difficult faint objects. There is something for everyone, no matter what your level of familiarity with Messier Objects.

## Why Participate?

Some people like to run marathons, others like puzzles, still others like contests. A Messier Marathon is a combination of those events! It is challenging to find all 110 Messier Objects in one night. No one is going to check up on whether or not you find them, but you'll gain the personal satisfaction of developing observational techniques and learning to locate and identify some of the most interesting and beautiful objects in the sky. UACNJ will issue a certificate to all who participate. An additional certificate will be awarded to participants who complete their list of all 110 Messier Objects at the UACNJ Marathon.

## What are Messier Objects?

The 110 Messier Objects are classified into five major types:

- 40 galaxies
- 28 globular clusters
- 31 open clusters
- 7 diffuse nebulae - emission, dark, and reflection
- 4 planetary nebulae

Each object is numbered with M prefacing the number. For example, M1 is one of more than 100 known supernova remnants in our galaxy. It is also known as the Crab Nebula and was the first object Messier catalogued—never realizing that it would become one of the most intriguing objects in the heavens! M51 is the Whirlpool Galaxy. It is the finest example of a face-on spiral galaxy. M27, a planetary nebula also known as the Dumbbell Nebula, is one of the closer planetaries. Its gaseous material was blown off the blue-dwarf star now at its center during the star's death throes 48,000 years ago, making it more than twice as old as typical planetaries. M15 is the Great Pegasus Cluster, a fuzzy that can be spotted with the unaided eye.

## Preparation

Like all events, a little preparation and practice goes a long way toward success. How many Messier Objects can you see this month? Any time of the year is a good time for a partial Marathon; it's just that some dates are better than others. Although the end of March and beginning of April is the most opportune span, many can be seen any clear night throughout the year. For example, at our latitude in mid-July, one can expect to see 93-95 objects. From the middle of October to the beginning of November, there is a potential of 105-plus Messier objects. The potential is 105 the first week in February, increasing to 109 at the end of month.

This means that you can start your preparation now and begin learning the techniques and methods to locate Messier objects. Although some of the objects can be viewed with the naked eye and even more can be seen with binoculars, they can be much harder to find than you might expect. The most difficult were the first ones numbered so UACNJ encourages prospective participants to get started now! If you are interested but not ready to commit to an all-night viewing session, contact me at [norton@optonline.net](mailto:norton@optonline.net). I will be preparing a weekly viewing schedule that includes some of the Messier Objects as well as how to begin learning three common ways of locating these objects (Right Ascension/Declination (RA-Dec) circles, star-hopping, and the geometric method.) For more information, I recommend these books:

*The Messier Objects*, part of the Deep Sky Companions, by Stephen James O'Meara  
*The Year-Round Messier Marathon Field Guide* by Harvard Pennington

